

WA1CN-C
WATTMETER

1. GENERAL. This procurement requires a true rms power measuring test set for use in the audio range.

2. CLASSIFICATION. Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications except the power source requirements are not invoked.

3. MEASUREMENT CAPABILITY. The equipment shall be capable of measuring output power, output impedance, and frequency characteristics of audio frequency devices within the minimum ranges, accuracies, and sensitivities specified below.

3.1 Frequency range. 20 Hz to 20 kHz.

3.2 Power measurement range. 0.1 mW to 20W.

3.2.1 Power measurement accuracy.

- a. ± 1.5 dB from 20 to 30 Hz.
- b. ± 1.0 dB from 30 to 50 Hz and from 6 to 10 kHz.
- c. ± 0.5 dB from 50 Hz to 6 kHz.
- d. ± 5 dB from 10 to 20 kHz.

3.3 Impedance. 2.5 ohms to 20 kilohms.

3.3.1 Impedance accuracy. At full-scale voltage:

- a. $\pm 15\%$ from 20 to 70 Hz.
- b. $\pm 7\%$ from 70 Hz to 2.5 kHz.
- c. $\pm 7\%$ from 2.5 to 5 kHz for impedances of less than 10 kilohms.
- d. $\pm 50\%$ from 5 to 20 kHz.

3.4 Display. The equipment display shall indicate power in watts and dBm. If a digital display is used, an analog meter shall also be incorporated for tuning purposes.

4. GENERAL REQUIREMENTS.

4.1 Weight. 10 kg (22 lb) maximum.

4.2 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.